

**REMARKS**

Claims 1-15 and 17 are pending in the application. Claims 1-8, 11-15 and 17 are rejected. Claims 9 and 10 are objected to, but would be allowable if rewritten in independent form. Applicant notes with appreciation the identification by the Examiner of allowable subject matter in claims 9 and 10. Claims 1 and 17 are amended herein to clarify Applicant's contribution to the art.

**Claim Rejections under 35 U.S.C. §102(b)**

Claims 1-7, 11, 13, 14-15, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. 3,685,291 (Fadden). Applicant traverses this rejection based on the above amendments and the following comments.

Applicant submits that the apparatus disclosed in Fadden operates on entirely different principles to Applicant's apparatus. In Applicant's apparatus, air is trapped in the trough between adjacent waves. As the waves move along the chamber, the volume of the trough reduces to compress the trapped air until it reaches the manifold and is released through the outlet port.

In Fadden, standing waves are created in the standing wave basin beneath the vertical chambers 50. Standing waves do not travel along the chamber and points on the surface of the standing waves merely oscillate vertically. Ambient air is admitted to each vertical chamber 50 from the intake manifold 60 located above each vertical chamber as the water level beneath each vertical chamber falls. As such, air is compressed and then expelled to the exhaust manifold 66 as the water level rises. Fadden's abstract is a reasonable summary of the operation of Fadden and is commended to the Examiner. Fadden's and Applicant's system have very little in common.

With reference to amended claim 1, Applicant submits that Fadden does not disclose a chamber having an inlet port at one end of the chamber adapted to face into a wavetrain and side walls delivering compressed air to a manifold located in the chamber opposite the chamber

inlet port and thence to an outlet port. Instead, Fadden discloses that the motion of the standing waves in each of the vertical chambers 50 expel compressed air to an exhaust manifold 66 located atop intake manifold 60. Fadden does not disclose a manifold located in a chamber opposite a chamber inlet port as recited in amended Claim 1. Fadden discloses the manifold is located outside a chamber, for example adjacent a top outer surface of the chamber.

Applicant submits that claims 2-7, 11, 13, and 14-15 depend from amended claim 1 and are patentable at least by way of their dependency.

Regarding claim 17, Applicant submits that Fadden does not disclose a) a manifold in the chamber at the end of the chamber remote from the inlet port, or b) a baffle in the manifold, or c) side plates in the chamber whereby waves advancing horizontally through the chamber are induced to compress air in their troughs and deliver compressed air to the manifold and thence to the manifold outlet port.

Fadden does not have a manifold in the chamber at the end of the chamber remote from the inlet port. That is, the manifolds of Fadden are located outside of the wave chamber. For at least this reasons, amended claim 17 is not anticipated by Fadden.

#### **Claim Rejections under 35 U.S.C. §103(a)**

Claims 8 and 12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 3,685,291 (Fadden). Applicant traverses this rejection.

Applicant submits that, in view of the above remarks, Fadden does not teach or suggest each of the limitations of amended claim 1, from which claims 8 and 12 depend. Accordingly, Applicant contends Claims 8 and 12 are patentable at least for this reason.

Furthermore, with respect to claim 8, Applicant notes that one of skill in the art would not be motivated to taper the 'baffle' of Fadden toward the inlet port. While Applicant disagrees, the Examiner has taken the position that the sides of the vertical chambers 50 are

baffles. The vertical chambers 50 of Fadden operate to compress air. Destroying the vertical orientation of the vertical chambers 50 of Fadden would appear at least to reduce their effectiveness by inhibiting the standing wave's travel upon contact with the tapered 'baffle.' This tapered 'baffle' may also prevent the creation of the standing wave by interfering with the vertical travel of the water. In view of the above, Applicant submits that Fadden does not make claim 8 obvious, and the rejection of claim 8 is improper and should be withdrawn.

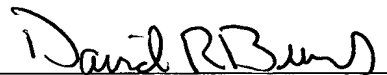
Regarding claim 12, reciting that the angle of the ramp is adjustable, the Office Action has not shown that Fadden teaches or suggests a ramp at all. Therefore, Applicant submits that the rejection of claim 12 is improper and should be withdrawn.

In view of the above, each of the presently pending claims in this application is believed to be in condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

A request for an extension is submitted herewith. However, if any additional fee is due, please charge our Deposit Account No. 12-0080, under Order No. HCM-019USRCE from which the undersigned is authorized to draw.

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Respectfully submitted,

By 

David R. Burns

Registration No.: 46,590

LAHIVE & COCKFIELD, LLP

28 State Street

Boston, Massachusetts 02109

(617) 227-7400

(617) 742-4214 (Fax)

Attorney For Applicant